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## REDUCTION OF ADOLESCENT DRUG ABUSE THROUGH POST-HYPNOTIC CUE ASSOCIATION

**ABSTRACT:** Six adolescents who were involved in a variety of drug misuse were self-referrals for treatment because they were anxious and scared due to adverse drug reactions. All were females ranging in age from 14 to 16 years; 4 were Indian-Metis, 2 were white. Treatment consisted of an initial comprehensive psychological examination and orientation interview, three intensive sessions of hypnosis where the girls practiced and learned to develop cue association, and finally a procedure to develop cue association in situations where the girls felt tense, anxious, and prone to drug misuse. Total number of sessions ranged from 6 to 15 and a follow-up interview was conducted 6 months after this point. In all cases it was found that drug misuse, as determined by interviews with the subjects and with significant people in their environment, had virtually stopped, although there was some mild use of alcohol.

Reports by Kim (1970), LeDain (1970), Smart and Bateman (1967), and Unwin (1968) have indicated a marked increase in adolescent drug abuse over the last few years, while professional mental-health personnel have had limited success with conventional psychotherapeutic approaches to these types of referral cases. One of the problems has been that people using illicit drugs have remained all but invisible within the overall social milieu (Cohen, 1969) and have maintained an "underground nature" (Unwin, 1968, p. 402) to their drug activities. However, as incidence of drug abuse increases, so has frequency and quantity of drug intake, with a concomitant increase in number and severity of side effects and symptoms. Adolescents are now feeling more discomfort and unpleasant symptoms and are more highly motivated to seek help.

Boyd (1970) has stated that adolescent drug misuse is an attempt to escape when stress becomes overwhelming, which suggests that

this pattern is parallel to the adult abuse of alcohol to cope with tension and feelings of personal inadequacy or frustration. Adolescents are likely to experience disturbing personal or social problems before they begin to use drugs, so that treatment should include attempts to deal with these problems. But it has also been indicated by LeDain (1972) that, in the early stages of treatment, some alternative to drugs must be found. It was hypothesized that if adolescent drug abusers could achieve some type of altered state of consciousness without the use of drugs, this would be a significant contribution to therapy.

For the purposes of this study, illicit drugs are defined and limited according to Laurie (1967) as any chemical substances that alter mood, perception, or consciousness, but exclude the licit substances of caffeine, nicotine, and alcohol. Abuse is taken to mean repeated non-medical intake despite adverse physiological or psychological effects.

### *Subjects*

The study is a case report of six adolescent females ranging in age from 14-1 to 16-7 who were self-referrals for treatment because of disturbing effects of illicit drug use. Four were of Indian-Metis ethnic origin while two were white. All had a history of unstable early family environment, family breakdown, or rejection, and multiple placements with associated running behaviour. All were staying in foster homes or group homes. Mental ability, as assessed with the Wechsler scales, demonstrated the typical performance-greater-than-verbal pattern of troubled youth, with full-scale IQs ranging from 78 to 114 (but Indian-Metis scores were expectedly deflated as indicated by improved Raven's Progressive Matrices scores using Indian-Metis norms).

### *Extent and Nature of Drug Abuse*

During the intake session and psychological assessment, the girls were asked to outline drug intake and to name two or more close friends familiar with their pattern of drug experiences. These peers were contacted to obtain verification on these self-reports.

All girls had participated in more than ten experiences with what they thought to be amphetamines, marijuana, and LSD. Only two had experienced hashish and none reported use of narcotics or solvent inhalation. The reported patterns of drug misuse were subsequently confirmed by the peer referees.

### *Presenting Symptoms*

The following symptoms were either self-reported, discovered during the objective assessment, or came from external sources and are consistent with those found by LeDain (1972):

— All girls exhibited a low self concept, feelings of depression,

lack of self worth, and bitter self-criticism. Half had either seriously contemplated or attempted suicide.

- All had problems in social relations and either withdrew and were passive or became verbally and physically aggressive toward their peers and showed some uncontrollable hyperactivity. There was a visible lack of social acquaintancy and friends.
- There was a consistent pattern of low motivation, lack of plans, and inertia. This was particularly relevant in terms of scholastic motivation and long-range plans.
- As indicated above, all had histories of running behaviour, and as a result of this, all had been truant from school for varying periods.
- All suffered visual hallucinations including "flashbacks" and "traces," and some also experienced colour confusion and tunnel vision. These reactions were directly related to LSD intake.
- There were consistent memory loss, confused thought processes, impaired reasoning ability, and time-space-relationship disorientation.
- All were at least mildly paranoid and suspicious; four were moderately to severely so. The paranoia was diverse and included authority figures, family, friends, social agencies, and law enforcement officers.
- The girls reported frequent nightmares and night terrors as well as insomnia and disturbed sleeping patterns.
- Finally, five of the girls reported repeated headaches of a moderate to severe nature.

The girls all stated that their reasons for seeking help were anxiety or panic over some of the symptoms. They were confused, afraid, and desperate, but at the same time were suspicious and ambivalent about seeking help.

### TREATMENT PROCEDURES

The aim of the treatment was to have subjects obtain a deep level of hypnosis, develop a satisfying visual image, and learn to associate this with a specific cue. The first two sessions for each subject included a comprehensive psychological assessment and case-history data, as well as an introduction and orientation to the procedures. During the third session, hypnosis was induced by a progressive muscle relaxation procedure followed by a visual imagery technique where the suggested scene was a tranquil, pastoral summer meadow. All subjects responded well to this experience and expressed amazement and satisfaction that they could so readily achieve a pleasant altered state of consciousness.

Hypnotic deepening, using fractionation and an escalator technique, was practiced during the next four sessions, while the girls also developed specific individual scenes and images which were pleasant, calm, and rewarding to them. They also were given the procedure of clasping their hands lightly together as a cue for self-induction and repeated visual imagery of their satisfying scenes. These cues

were practiced in their environment in situations where the girls felt tense, anxious, and prone to drug use.

Further sessions of supportive counselling were conducted, if requested by the girls, at this point. Total number of sessions ranged from six to 15 and follow-up interviews were conducted with most of the subjects and significant people in their lives such as their peer referees, school authorities, social workers, and foster parents six months after the final session.

## RESULTS

At termination, all subjects had ceased to use amphetamines, hashish, and LSD and this behaviour was maintained at the follow-up. Four of the girls quit smoking marijuana, but two continued mild and infrequent use. School attendance, motivation, and general grades improved in all cases, to a high level in one case where mean grades rose from mid-50's to mid-70's.

Self concept was visibly improved with a sharp decrease in negative self-evaluations, increased self-confidence, and neater personal appearance. Two girls began to wear dresses and skirts after wearing slacks and jeans for several years, and all girls experimented with their hair styles and tried new types of make-up. There were much-improved social relationships, with the girls reported to have more friends, and friends who were more carefully selected.

Visual hallucinations had nearly disappeared by the end of treatment, although there was still the occasional flashback, which the girls could control if they avoided eye fixation or flashing lights. All hallucinations had disappeared by the follow-up session.

Running behaviour stopped for two of the girls, but due to family or group-home pressures there were still infrequent and short running episodes with the other four girls right up to the follow-up session. These were only of a one- or two-day duration, were usually on holidays, and so did not involve school truancy, and in all episodes the girls returned of their own volition.

The area which did not improve was the consumption of alcohol. One girl quit drinking and one heavy drinker reduced her input, but all other subjects retained or even slightly increased their alcohol consumption between termination and follow-up.

## DISCUSSION

The current results indicate that the illicit drug experience serves a vital purpose for the adolescent in terms of coping with adverse feelings about the self, stress in social relationships, and generalized tension and anxiety. The reinforcement value of such behaviour is therefore so intense that rapid and total abstinence from drug use would be highly traumatic, painful, unrewarding, and therefore unlikely to succeed in and of itself.

Researchers such as Boyd (1970) have previously shown that drug abusers require some alternative form of relief from stress in the

form of an adequate coping mechanism, and Cohen (1969) has further suggested that this type of patient also requires an alternative form of life enhancement if drug withdrawal is to be complete and lasting.

It has been demonstrated that such an alternative state of consciousness may be achieved through various methods such as the work of Benson and Wallace (1971) with transcendental meditation, and the accidental discovery by Baumann (1970) of hypnosis and visual imagery as treatment adjuncts.

Subjective responses by the individuals in this study have confirmed these hypotheses, with the girls acknowledging that a viable alternative was essential to their eventual cessation of illicit drug use.

But the results show that alcohol use was not significantly changed and marijuana use was minimally affected, which may mean that the hypnotically induced state only has replacement value for the more complicated hallucinogenic or stimulant drug experience, and is of limited value with mild sedatives such as alcohol or mild hallucinogens such as marijuana.

Over all, there is a strong indication that controlled altered states of consciousness such as hypnotically induced visual imagery and drug-related scenes may serve as a powerful replacement stimulus and alternative coping mechanism for the adolescent who has been consistently relying upon illicit drugs for this effect.

**RESUME:** Six adolescentes ayant fait un mauvais usage de drogues ont elles-mêmes demandé à être traitées; elles étaient anxieuses et appréhendaient leurs réactions. On leur a procuré le traitement suivant: d'abord des entrevues préliminaires et un examen psychologique complet, ensuite trois sessions intensives d'hypnose devant leur permettre d'apprendre à faire certaines associations et, finalement, une procédure visant à généraliser cet apprentissage aux situations dans lesquelles elles se sentaient tendues, anxieuses et inclinées à faire un abus de drogues. Le nombre total des sessions a varié de 6 à 15. Six mois plus tard on a effectué une entrevue de relance. En se basant sur les entrevues avec les sujets et d'autres personnes importantes de leur entourage, on a pu observer que l'usage abusif de la drogue avait pratiquement cessé, bien qu'on ait noté un léger usage d'alcool.

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